

What is claimed is:

1. A chemical vapor deposition method, comprising:
 - (i) depositing a silicide on a substrate; and
 - 5 (ii) purging residual gases remaining from said depositing step by using air including H₂O gas.
2. The method as recited in claim 1, wherein in (i), said silicide is deposited using tungsten hexafluoride (WF₆) and dichlorosilane (DCS) as reaction
10 gases.
3. The method as recited in claim 1, wherein in (i), said silicide is deposited at a pressure in the range of approximately 0.1Torr to approximately 760Torr and a temperature in the range of approximately 500°C to approximately
15 800°C.
4. The method as recited in claim 1, wherein in (ii), said air including H₂O gas further includes O₂ gas and at least one inert gas.
- 20 5. The method as recited in claim 4, wherein said at least one inert gas is selected from the group consisting essentially of argon (Ar), nitrogen (N₂), and helium (He).

6. The method as recited in claim 4, wherein a partial pressure of each of said O₂ gas and said H₂O gas is approximately 10% or more.

7. The method as recited in claim 1, wherein the method further
5 comprises:

after (ii), purging said residual gases by successively flowing O₂ gas and at least one inert gas.

8. The method as recited in claim 1, wherein in (ii), said purging of said
10 residual gases is carried out at a pressure in the range of approximately 500Torr to approximately 760Torr.

9. A chemical vapor deposition method, comprising:
(i) loading a substrate in a load-lock chamber of a CVD system;
15 (ii) transferring said substrate into a processing chamber;
(iii) depositing a silicide on said substrate in said processing chamber;
(iv) transferring said substrate into said load-lock chamber; and
(v) purging residual gases remaining from said depositing step by flowing
air including H₂O (g) into said load-lock chamber.

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10. The method as recited in claim 9, wherein in (iii), WF₆ and DCS are introduced as reaction gases into said processing chamber.

11. The method as recited in claim 9, wherein in (v), said air including H₂O gas further includes O₂ gas and at least one inert gas.

12. The method as recited in claim 11, wherein a partial pressure of each
5 of said O₂ gas and said H₂O gas is 10% or more.

13. The method as recited in claim 9, wherein in (v), said purging of said residual gases is carried out at a pressure in the range of approximately 500Torr to approximately 760Torr.

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14. The method as recited in claim 9, the method further comprising:
after (v), purging said residual gases by successively flowing O₂ gas and at least one inert gas.

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15. A chemical vapor deposition apparatus, comprising:
a load-lock chamber;
a processing chamber mounted on said load-lock chamber;
a vent line connected with said load-lock chamber; and
an air purge line connected with said load-lock chamber, wherein said air

20 purge line supplies air including H₂O gas.

16. The apparatus as recited in claim 15, wherein said air purge line and said vent line are connected to each other.

17. The apparatus as recited in claim 16, further comprising a vacuum pump connected to said vent line.

5 18. The apparatus as recited in claim 15, further comprising an O₂ gas line connected to said air purge line.

19. The apparatus as recited in claim 15, further comprising a filter connected to said air purge line.

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20. The apparatus as recited in claim 15, further comprising a vacuum pump connected to said air purge line.